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From: Andy Thomson
Sent: Monday, May 05, 2014 11:29 AM
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Cc: Steve Gili
Subject: Leucite April 28th & May 3rd Exceedance Notification

All,

On April 28th & again on May 3rd, 2014, Black Butte Mine recorded a high concentration of the ambient air standard for particulate matter of 150 micrograms per cubic meter for a 24 hour average concentration at the Leucite TEOM. IML has validated the data and it shows an average concentration of 219.9 micrograms per cubic meter for the April 28th event and 347.3 micrograms per cubic meter for the May 3rd event. This email will constitute the required notification from Black Butte to the WYDEQ of an exceedance.

As noted before, these events are not due to any of our operations but are due to the extremely dry conditions along with the poor conditions of the range in the vicinity of the TEOM.

This email will constitute the required notification from Black Butte to the WYDEQ of an exceedance. We will be submitting exceptional events packages for each of these events.

Please let me know if you have any questions or need additional information.

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Black Butte Coal Mine Exceptional Events Documentation for the Event on April 28, 2014 Leucite TEOM Location

Produced by:

Black Butte Coal Company

July 15, 2014



EXECUTIVE SUMMARY

On April 28, 2014 the Leucite TEOM located at Black Butte mine in Sweetwater County, Wyoming recorded 24-hour average concentration of $219.9 \mu\text{g}/\text{m}^3$. This reading is in exceedance of the federal 24-hour PM10 standard. Black Butte believes that this exceedance is the result of an Exceptional Event as determined by the Environmental Protection Agency.

On March 22, 2007 the EPA promulgated the Exceptional Events Rule (EER) to address exceptional events in 40 CFR Parts 50 and 51. The EER allows for states and tribes to “flag” air quality monitoring data as an exceptional event and exclude that data from use in the determination of exceedances or violations of the National Ambient Air Quality Standards (NAAQS), provided the EPA concurs with the demonstration submitted.

This report is intended to provide documentation and support that the exceedance of the $150 \mu\text{g}/\text{m}^3$ 24 hr PM10 standard that occurred at the Black Butte Mine on April 28, 2014 qualifies as an exceptional event under the EER by meeting all requirements set forth in 40 CFR Part 50.14(c)(3)(iii). Black Butte Coal Company contends that the exceedance that was measured on April 28, 2014 was a result of natural events that were not reasonably controllable or preventable. Furthermore, the fugitive dust measured was from ground that is not under the control of Black Butte Coal Co.

Section I of this report provides a history and basic information of the Black Butte mine. As well as providing some background as to when operations were taking place at the Leucite Mine.

Section II of this report is a narrative of events that lead up to and during the event in question. It includes information from notes, reports and eye-witness accounts taken before and during the event. It will provide factual information regarding the overgrazing that occurred on the land surrounding the Leucite TEOM. Details regarding the land conditions that existed off the mine permit area but in the location of the Leucite TEOM are reported in this Section.

Section III of this report details the wind event that occurred on April 28, 2014 and provides the explanation that “the event affected air quality”. This section provides evidence that it was a “natural event”. It also clearly demonstrates the clear causal relationship with the overgrazing conditions that existed off the mine permit area and the wind event.

Section IV of this report provides the factual evidence that despite taking all possible and required actions to prevent and control the event, the event on April 28, 2014 was not reasonably controllable or preventable.

Section V of this report provides the graphical data evidence that the event on April 28, 2014 caused measurement concentrations beyond normal historical fluctuations.

Section VI of this report builds upon the data provided in Sections II through V to provide clear evidence that no exceedance on April 28, 2014 would have occurred “but for” the presence of the natural event.

Section VII of this report provides conclusions and summarizes the exceptional event and how they relate to the rules and requirements in the EER.

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DOCUMENTATION REQUIREMENTS OF THE EXCEPTIONAL EVENTS RULE (EER)

Section 50.14(c)(3)(iii) of the EER states that in order to justify excluding air quality monitoring data, evidence must be provided to satisfy the following elements:

1. The event satisfies the criteria set forth in 40 CFR 501(j) that:
 - a. The event affected air quality,
 - b. The event was not reasonably controllable or preventable, and
 - c. The event was caused by human activity unlikely to recur in a particular location or was a natural event;
2. There is a clear causal relationship between the measurement under consideration and the event;
3. The event is associated with a measurement concentration in excess of normal historical fluctuations;
4. There would have been no exceedance or violation but for the event.

Section I of this report provides a history and basic information of the Black Butte mine. As well as providing a background as to what, why and when operations were taking place at the Leucite Mine.

Section II of this report is a narrative of events that lead up to and during the event in question. It includes information from notes, reports and eye-witness accounts taken before and during the event. It will provide factual information regarding the overgrazing that occurred on the land surrounding the Leucite TEOM. Details regarding the land conditions that existed off the mine permit area but in the location of the Leucite TEOM are reported in this Section.

Section III of this report details the wind event that occurred on April 28, 2014 and provides the explanation that "the event affected air quality". This section provides evidence that it was a "natural event". It also clearly demonstrates the clear causal relationship with the overgrazing conditions that existed off the mine permit area and the wind event.

Section IV of this report provides the factual evidence that despite taking all possible and required actions to prevent and control the event, the event on April 28, 2014 was not reasonably controllable or preventable. Additionally, it will clearly demonstrate that the fugitive dust measured at the Leucite TEOM on April 28, 2014 was from land outside of the mine permit and not under the control of Black Butte.

Section V of this report provides the graphical data evidence that the event on April 28, 2014 caused measurement concentrations beyond normal historical fluctuations. It also will demonstrate that the overgrazing by sheep herds, not managed by Black Butte, that occurred in the weeks prior, on land that is not managed by Black Butte, was the source of the fugitive dust and not the mine permit land at all.

Section VI of this report builds upon the data provided in Sections II through V to provide clear evidence that no exceedance on April 28, 2014 would have occurred but for the presence of the natural event.

Section VII of this report provides conclusions and summarizes the exceptional event and how they relate to the rules and requirements in the EER.

I. BACKGROUND INFORMATION FOR THE EVENT

Leucite Hills mine permit area, located in Sweetwater County, Wyoming is a former surface coal mining operation. The mine has not produced coal since 2008. Since that time the former producing pits have been in various stages of reclamation. At the end of January 2014 all prior producing pits had been completely regraded except for Pit 21 and Pit 24. The majority of Pit 24 had been regraded with only 46 acres remaining that would require both dozer regrading and truck regrading. 46 acres of Pit 24 had been topsoiled by the end of January 2014. In February 2014 no operations had taken place at the Leucite mine. In March 2014 no operations had taken place at the Leucite mine. The Leucite Permit area fugitive dust emissions are monitored by 1 TEOM. This TEOM, is located 1.5 miles to the East of the mine permit boundary on a Section of land that is owned by Rocky Mountain Power. Since the TEOM is not located within the mine permit boundary, access to its location is granted through a License Agreement between Union Pacific Resources and Black Butte Coal Company that allows for a 40 foot wide light vehicle access to the TEOM. Figure I.1 shows the pit boundaries, permit boundary, and TEOM locations.



Figure I.1

The land within and around the Leucite Hills permit boundary is referred to as the checkerboard. This refers to fact that every other section of land is owned or controlled by BLM or Anadarko. The Anadarko land was formerly Union Pacific Resources. The Leucite Hills mine leases the rights to mine from both the BLM and Anadarko. Some of the sections have been sold to other entities as well as some have been

given to the State of Wyoming. The section that the TEOM is located in is currently owned by Rocky Mountain Power. This section was sold by Anadarko to RMP several years ago. Much of the livestock grazing rights in this area are controlled by the Rock Springs Grazing Association (RSGA). The RSGA then allots areas to its members for them to graze their cattle and sheep.

Grazing by members of the RSGA occurs on and around both the Leucite Hills mine and the Black Butte mine. However, when they are grazing within the mine permit boundary Black Butte Coal Co. has some say into where and when they can graze their herds. Outside of the permit boundary, we have no control over grazing activities. Black Butte Coal Co. has worked very closely with the RSGA over the past 3 years to organize grazing activities at the Leucite Hills mine so that reseeded areas can establish and take hold.

In the winter of 2013-14 sheep herds were grazed extensively on the large flats located between County Road 15 and the foothills to the East, around the location of the Leucite TEOM and in the Ten Mile Draw area of Sweetwater County. The flat is bounded by a county road and wetland type habitat on the west side and foothills and cliff sets on the Eastern side. The TEOM is located in the flat. The flat appears to be used by the sheep herders as a corridor moving sheep between Ten Mile Draw and the Leucite Hills area.

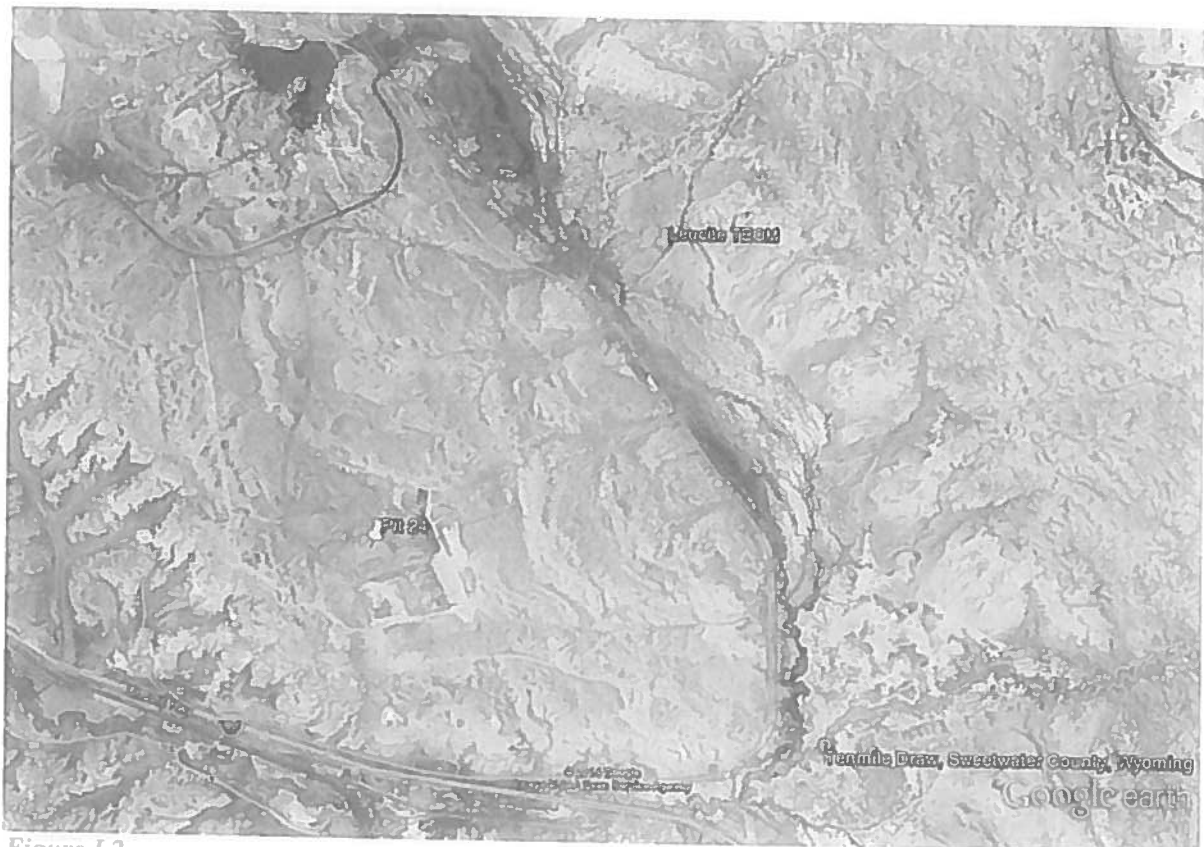


Figure I.2

II. NARRATIVE OF ACTIONS LEADING UP TO AND DURING THE EVENT

In 2013 dozer and truck regrade operations took place at the Leucite Hills mine. Dozers worked in Pit 21 and 24 and trucks worked in Pit 24. Some topsoil laydown activities also occurred in Pit 22. This activity consisted of using scrapers to lay down 18 inches of topsoil on regraded areas followed by using a farm tractor to crimp straw into the topsoil to stabilize the soil. The farming activities were concluded in October 2013. The truck regrade work in Pit 24 extended into January 2014. This project consisted of using contractor haul trucks to haul spoil off a pile and place it into the final pit. Only 137,000 yards was done in 2014. This project was completed by Schmid Construction and finished on January 17, 2014. No other activities had taken place in Leucite between January 17 and April 28, 2014.

During the winter of 2013-14 sheep were grazed in the Ten Mile draw and Leucite TEOM locations. This has taken place for several years. The sheep are from herds owned by members of the RSGA and are grazed on land that is neither owned, leased nor controlled by Black Butte Coal. Occasionally the RSGA will graze sheep on land within the Leucite Hills permit but this is limited while the reseeded areas try to establish. This is done in the best interest of Black Butte Coal as well as the RSGA. The herds were grazed from the Ten mile draw area, northwest along the flats that parallel CR 15. These herds will spend several days at a time in this area. This year the herder made his camp just feet from the Leucite TEOM. Figure II.1 shows the location of the TEOM and the location of the sheep herder camp.

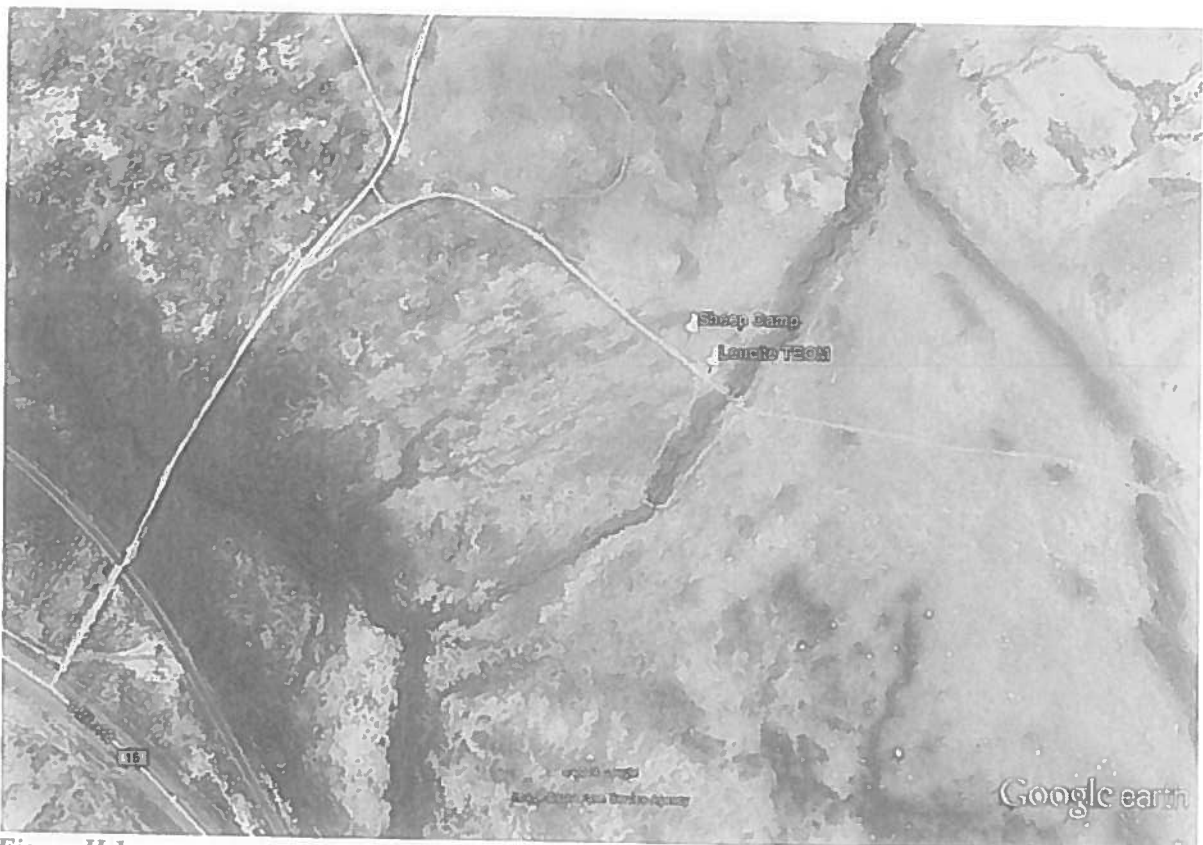


Figure II.1

The grazing activities that took place in this location during the winter of 2013-14 is best described as extreme over-grazing. The vast majority of the edible vegetation had been completely removed leaving only some sage brush and salt brush. Figure II.2 shows the state of the land around the TEOM following the over-grazing that occurred during the winter of 2013-14. The sheep herd left this area approximately 2.5 months prior to April 28, 2014.

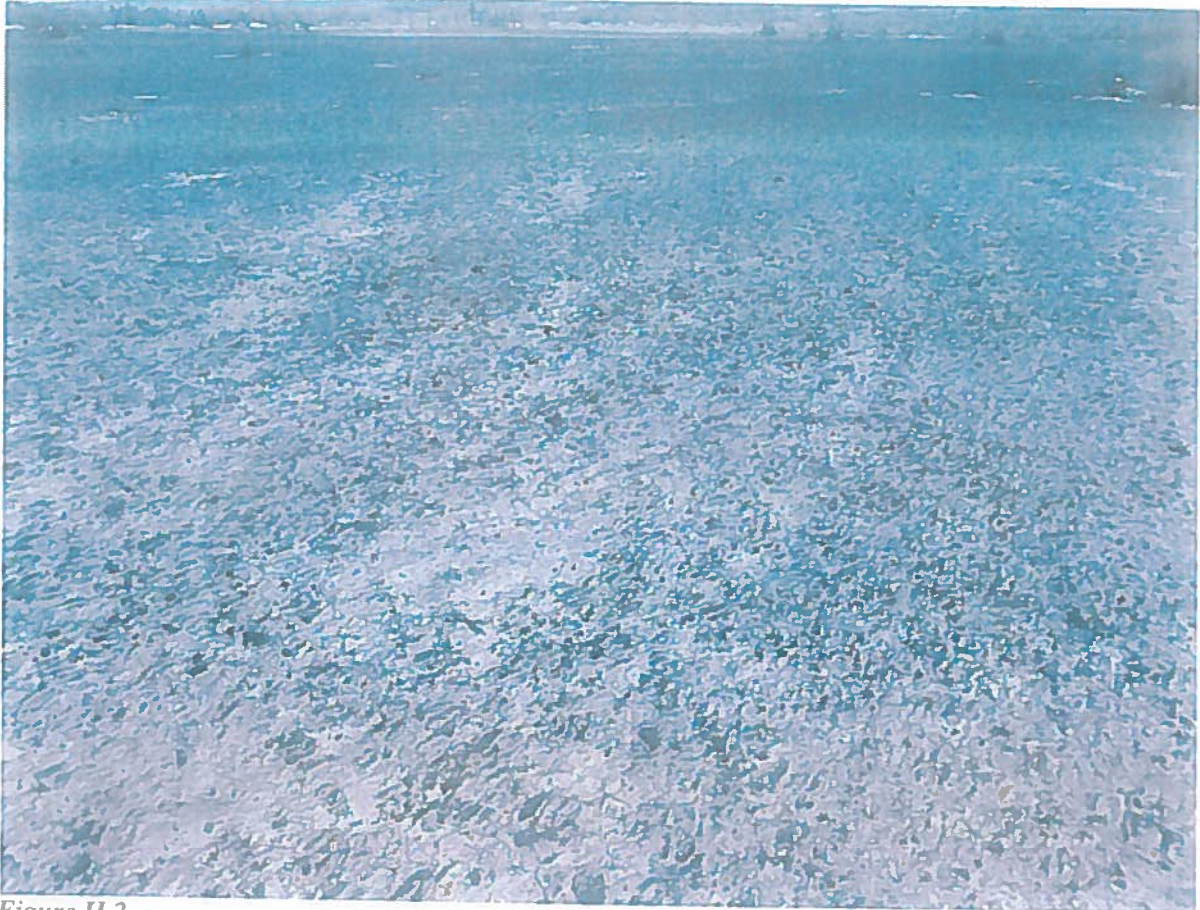


Figure II.2

The grazing activities had been noted by Andy Thomson, Black Butte environmental engineer in January while he performed his monthly TEOM verification at the Leucite TEOM. However, since this is on land that Black Butte has no control over there was nothing we could do to force the grazing to stop.

Since mid-February it had been noted that as wind speeds picked up, hourly PM10 concentrations rose as well. It was also noted that the source of the dust was from over-grazed areas off of the mine permit area and under the control of others.

On February 21, 2014 and March 17, 2014 the mine experienced high winds throughout the day. Both of these days resulted in high PM10 readings and eventually an exceedance of the 24-hr PM10 standard at the Leucite TEOM. The source of the fugitive dust on the February and March events were found to be from over grazed areas off the mine permit area on ground that Black Butte has no control over.

On March 28, 2014 representatives from the Wyoming Department of Environmental Quality – Air Quality Division, Mr. Kirk Billings and Mr. Jeff Wendt, travelled to the Leucite TEOM location at the invitation of Black Butte Coal to view firsthand the uncontrollable dust situation that had been created by the overgrazing on the surrounding property.

On April 28, 2014 there were no activities taking place at the Leucite Mine. There had been no activity at the Leucite Mine since January 17, 2014, when regrading operations in Pit 24 stopped. The day started out with average wind speeds in the teens. As had been seen over the past few months, unless average winds speeds reached the mid twenties or maximum wind speeds reached the thirties, hourly PM10 concentrations would remain at low levels. This is exactly what occurred on the 28th. The 8:00 am reading recorded the first maximum wind speed in excess of 30 mph. This coincided with an increase in the hourly PM10 reading from 14.4 $\mu\text{g}/\text{m}^3$ at 7:00 am to 35.5 $\mu\text{g}/\text{m}^3$. By 9:00 am the average wind speed had reached 20.1 mph with maximum speeds at 30.7. The hourly PM10 concentration at 9:00 am reached 217.4 $\mu\text{g}/\text{m}^3$. By 11:00 am maximum wind speeds reached above the 40 mph mark and as expected PM10 concentrations skyrocketed. The 11:00 am reading was 1,016.7 $\mu\text{g}/\text{m}^3$. Maximum wind speeds remained above 40 mph until 2:00 pm. During this time the hourly PM10 concentrations ranged between 345.2 $\mu\text{g}/\text{m}^3$ and 1064.3 $\mu\text{g}/\text{m}^3$. By 6:00 pm average wind speeds had dropped below the 20 mph mark and maximum wind speeds dropped below the 30 mph mark. Consequently the hourly PM10 readings dropped as well to 17.2 $\mu\text{g}/\text{m}^3$ at 6:00 pm. However, the duration of the high winds resulted in hourly PM10 readings so high that an exceedance of the 24 hr standard was inevitable. The final 24 hour PM10 concentration at the Leucite TEOM for April 28, 2014 was 219.9 $\mu\text{g}/\text{m}^3$.

Since we had no activities taking place at Leucite on the day in question when PM10 readings reached action levels the only response we could take was to begin monitoring the situation. Mr. Thomson traveled to the Leucite Mine on the 28th to verify what we knew to be happening. That the source of the fugitive dust being measured by the Leucite TEOM was from land not under our permit and not under our control. This was confirmed by Mr. Thomson. Since mid January 2014, we had been experiencing unusually high readings at the Leucite TEOM. All investigations into the source of the fugitive dust had resulting in the source coming from the overgrazed land surrounding the Leucite TEOM and not from the Leucite Mine directly. Figures II.3 – II.8 show the source of the windblown dust being recorded at the Leucite TEOM.



Figure II.3



Figure II.4

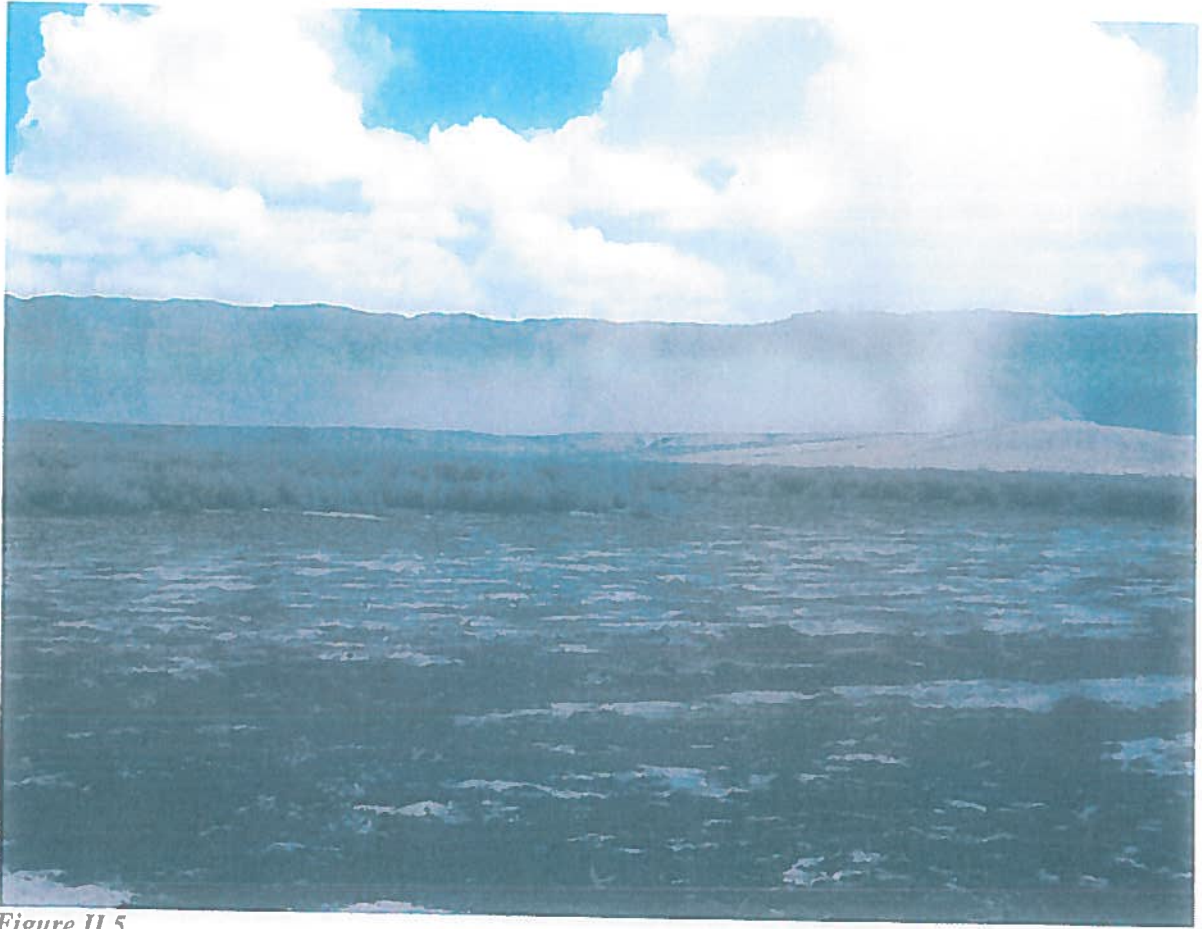


Figure 11.5



Figure II.6



Figure II.7



Figure II.8



Figure II.9



Figure II.10

It is important to note that all the previous photos shown in Figures II.3 – II.10 are from areas that are off the mine permit area and directly surround the Leucite TEOM. Black Butte has no ability or authority to treat these areas with any form of dust suppression. Furthermore, all of the land in question is either private land owned by Rocky Mountain Power or Anadarko Petroleum or BLM land not leased by Black Butte Coal. In either case we have no legal rights to trespass on the private land or take equipment onto the public BLM land. The only portion of this land we have any legal right to access is the 40' wide right-of-way we have with Union Pacific Resources. However, this right-of-way only allows for light vehicle traffic and nothing else. A copy of the License Agreement we have in place with Union Pacific Land Resources for access to the TEOM is included in the Appendix. If we were to attempt to treat these areas with water to control the dust we would be discharging water off the mine permit area which is a violation of our Wyoming DEQ water discharge permit.

Mr. Thomson also travelled on the Leucite mine to verify that fugitive dust was not being generated from its location. The following figures are photos taken of the Leucite Mine at the same time the photos in Figures II.3-10 were taken.



Figure II.11



Figure II.12

Figures II.11 and II.12 were taken from a location directly west of the Leucite TEOM, on the western edge of the overgrazed land, looking directly west towards the Leucite Mine. At the time the photos were taken the wind was coming from the West and hourly PM10 readings were in the thousands. The only way to generate hourly readings this high is to have significant and sustained visible airborne dust concentrations. As can be seen in the above photos there is no visible fugitive dust coming from the Leucite Mine. There is however, significant visible dust coming from the areas off the mine permit that surround the Leucite TEOM as shown in Figures II.3-10.

Monitoring of the dust conditions continued throughout the day. Personnel at the mine continued to investigate ways to control the dust being generated off the mine permit area. On the 28th we did have a smaller rental water truck on site. This was small enough to possibly travel along the access road to the TEOM but would technically be in violation of the light vehicle only use. Additionally, the only source of water we have to control the dust is from the mine permit area and any application of this water to the area contributing to the dust would have been an illegal discharge of mine water off the permit area and subject to severe penalties from the state. As with the prior dust events recorded in 2014 at the Leucite TEOM we were left with no viable or legal mitigation means. We were left to monitor and hope that the wind would die down.

III. METEOROLOGICAL CONDITIONS ON APRIL 28, 2014 AND ITS EFFECT ON AIR QUALITY

Sustained hourly wind speeds on April 28, 2014 were above the 20 mph mark for 9 out of 24 hours. The lowest recorded hourly wind speed on April 28, 2014 was 56 mph at 10:00 pm. Maximum hourly wind speeds never dropped below 26 mph from 8:00 am through 9:00 pm. The highest recorded wind speed on the 28th was 44.9 mph. The extended period of high wind speeds driving through the area of overgrazing resulted in unusually high hourly PM10 readings for such an extended period of time that by 4:00 pm there was no practical way the daily PM10 reading would be below 150 $\mu\text{g}/\text{m}^3$.

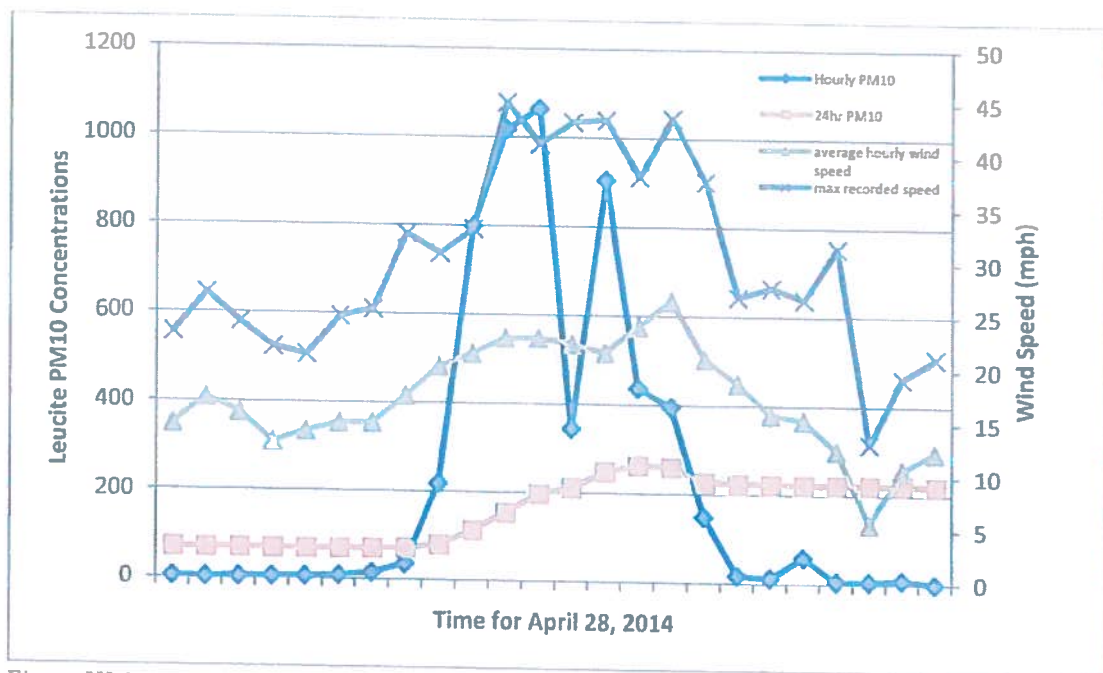


Figure III.1

Figure III.1 shows the correlation of wind speed and PM10 concentrations recorded on April 28, 2014 for the Leucite TEOM. Note the direct correlation between the spikes in wind gusts and the spikes in the hourly PM10 readings.

Table III.1 provides the maximum wind speed recorded during each hour and the corresponding Hourly PM10 concentration recorded at the Leucite TEOM.

Time	Hourly Wind Speed (mph)	Max Wind Speed (mph)	Leucite Hourly PM10 Conc. ($\mu\text{g}/\text{m}^3$)
04/28/2014 01:00 AM	14.5	23.1	3.5
04/28/2014 02:00 AM	17	26.8	2.6
04/28/2014 03:00 AM	15.6	24.1	3.3
04/28/2014 04:00 AM	12.9	21.8	4.2
04/28/2014 05:00 AM	13.9	21.1	5.1
04/28/2014 06:00 AM	14.7	24.7	7.7
04/28/2014 07:00 AM	14.7	25.4	14.4
04/28/2014 08:00 AM	17.3	32.5	35.5
04/28/2014 09:00 AM	20.1	30.7	217.4
04/28/2014 10:00 AM	21.3	33	798.2
04/28/2014 11:00 AM	22.8	44.9	1016.7
04/28/2014 12:00 PM	22.8	41	1064.3
04/28/2014 01:00 PM	22.3	43.1	345.2
04/28/2014 02:00 PM	21.5	43.3	904.8
04/28/2014 03:00 PM	24	38	437.6
04/28/2014 04:00 PM	26.4	43.5	395.8
04/28/2014 05:00 PM	21	37.6	148.7
04/28/2014 06:00 PM	18.7	26.8	17.2
04/28/2014 07:00 PM	15.8	27.7	12.3
04/28/2014 08:00 PM	15.3	26.6	58.8
04/28/2014 09:00 PM	12.5	31.4	5.2
04/28/2014 10:00 PM	5.6	13.1	5.2
04/28/2014 11:00 PM	10.7	19.2	9.1
04/29/2014 12:00 AM	12.3	21.1	0.4

Table III.1

IV. EVENT WAS NOT REASONABLY CONTROLLABLE OR PREVENTABLE

No operations had taken place at the Leucite mine on April 28, 2014. Additionally, no operations had taken place at the Leucite mine since January 17, 2014. That was the day that Schmid Construction complete spoil regrade work in Pit 24. On April 28, 2014 mine representative Andy Thomson traveled to the Leucite Mine to observe the source of the excessive fugitive dust. He noted that no noticeable fugitive dust was being produced from the Leucite mine area but rather the source of the excessive dust was from private and Federal land surrounding the Leucite TEOM. **Land that Black Butte Coal has no control over.** It is important to note that Andy Thomson is trained and certified to perform Opacity readings for Black Butte. There is no better source at Black Butte than Andy to determine, visually, the amount of fugitive dust being emitted at the mine.

Given that the source of the dust was from overgrazed land that was off the Leucite Mine permit area and neither under the jurisdiction of the mine or under our control we could do nothing more than note this condition and take photographs. We lacked both the authority and ability to apply dust suppression to the areas that were generating the dust. No new or different operations had taken place in 2014 at the Leucite Mine than what had taken place since its inception. As a matter of fact fewer operations had taken place in 2014 than had ever taken place at the Leucite Mine. The mine has not been in production since 2008. The problem with high PM10 readings at Leucite did not start until February 2014. Prior to this there had been no recorded exceedances of the 24hr PM10 standard at the Leucite Mine. The overgrazing of the land surrounding the Leucite TEOM occurred in the winter of 2013-14. This is in direct correspondence to the sudden increase in PM10 readings at the Leucite TEOM. Between February and April 2014 attempts to contact the owners of the land that were responsible for the high fugitive dust being recorded were made by Mr. Steve Gili, General Manager of Black Butte Coal company. It was not until April of 2014 that Mr. Gili's phone calls and messages were returned. The representative from Rocky Mountain Power he spoke to was not aware that an grazing had taken place on their land. He stated that he did not understand how someone else could graze his land without his approval. Mr. Gili requested permission to perform mitigation activities to their land at the expense of Black Butte Coal Company. This mitigation would be in the form of crimping straw into the bare land in hopes of slowing the surface wind speeds that were driving the dust. Mr. Gili was told that they would need to investigate this option but ultimately his request was never responded to.

Without even the possibility of performing dust mitigation activities on the land in question, Black Butte was ultimately left with no options to mitigate the fugitive dust. Therefore leaving Black Butte with no reasonable way of preventing the exceedance. For all practical purposes this exceedance is a result of poor land management on the part of Rocky Mountain Power and the Bureau of Land Management and therefore should be their responsibility for correcting.

ACTION PLAN RESPONSE

Black Buttes approved Air Monitoring Action Plan uses a combination of 1 hour and 24 hour readings to determine recommended and required actions at the mine in response to elevated readings. Compliance to the 24 hour levels is determined by the rolling 24 hour readings recorded each hour. However, mine personnel are instructed and trained to also utilize the calculated 24 hour readings as a guideline to determine recommended and required responses. If either of these numbers reaches an action level then a response to the Action Plan is required. This is done out of an abundance of caution as the calculated 24

hour readings will in most cases result in a higher 24 hour reading than the rolling 24 hour readings. This is particularly true for a sudden and extreme wind event that is preceded by a relatively mild wind event. Compliance to the Air Monitoring Action Plan is determined by responses in comparison to the rolling 24 hour readings. This methodology is listed in the approved Action Plan.

Action requirements of the 24 hour greater than 130 $\mu\text{g}/\text{m}^3$ action level are that complete records are taken, mine manager is notified and photographs will be taken if possible. Shutdown requirements are that all operations be shutdown in the affected areas. In Leucite there were no operations taking place that day.

All actions taken by Black Butte were in exact accordance with the mines approved Air Monitoring Action Plan. Table IV.1 lists the hourly wind speed, hourly and 24 hour PM10 concentrations, operations in place and actions taken by the mine in accordance to the Action Plan for each hour of the day for the Leucite Mine area.

Date and Time	Hourly Wind speed (mph)	Hourly PM10 ($\mu\text{g}/\text{m}^3$)	24-hour PM10 ($\mu\text{g}/\text{m}^3$)	Actions Taken
04/28/2014 01:00 AM	14.5	3.5	69.2	No ops taking place. No action level reached.
04/28/2014 02:00 AM	17	2.6	68.9	No ops taking place. No action level reached.
04/28/2014 03:00 AM	15.6	3.3	68.8	No ops taking place. No action level reached.
04/28/2014 04:00 AM	12.9	4.2	68.5	No ops taking place. No action level reached.
04/28/2014 05:00 AM	13.9	5.1	68.3	No ops taking place. No action level reached.
04/28/2014 06:00 AM	14.7	7.7	68.5	No ops taking place. No action level reached.
04/28/2014 07:00 AM	14.7	14.4	69	No ops taking place. No action level reached.
04/28/2014 08:00 AM	17.3	35.5	70.8	No ops taking place. 24 hour action level reached. Monitoring
04/28/2014 09:00 AM	20.1	217.4	79.3	No ops taking place. 24 hour action level reached. Monitoring
04/28/2014 10:00 AM	21.3	798.2	112.1	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 11:00 AM	22.8	1016.7	153.1	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 12:00 PM	22.8	1064.3	195.8	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 01:00 PM	22.3	345.2	210.1	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 02:00 PM	21.5	904.8	247.5	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 03:00 PM	24	437.6	262.5	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 04:00 PM	26.4	395.8	259.2	Hourly and 24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 05:00 PM	21	148.7	226.2	24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 06:00 PM	18.7	17.2	223.4	24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 07:00 PM	15.8	12.3	222.9	24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 08:00 PM	15.3	58.8	222.2	24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 09:00 PM	12.5	5.2	222.3	24 hour action level reached. No ops taking

				place. Monitoring.
04/28/2014 10:00 PM	5.6	5.2	222.1	24 hour action level reached. No ops taking place. Monitoring.
04/28/2014 11:00 PM	10.7	9.1	221.2	24 hour action level reached. No ops taking place. Monitoring.
04/29/2014 12:00 AM	12.3	0.4	219.9	24 hour action level reached. No ops taking place. Monitoring.

Table IV.1

The information presented in this Section, Section II and in Section III clearly demonstrates that the source of the fugitive dust was not from the Leucite mine. Furthermore, there were no operations taking place at Leucite on the day in question. The mine had no actions that we could take to control the dust being emitted from other land owners. Given that the all reasonable and required actions were taken by the mine on April 28, 2014 it stands to reason that the event was not reasonably controllable by Black Butte Coal and therefore Black Butte Coal should not be held responsible for the exceedance.

V. NORMAL HISTORICAL FLUCTUATIONS

Leucite TEOM Location

The Environmental Protection Agency, EPA, generally considers a 3-5 year time period when looking at Normal Historical Fluctuations. Data for this document looked at a time period from January 1, 2011 through May 1, 2014. Figure V.1 shows all hourly readings taken during this timeframe. The spike seen in the far right side of the graph shows the unusually high readings that began in February 2014 following the grazing activities that occurred on the land surrounding the Leucite TEOM. Clearly the high 1-hr readings that began in February are far outside of the prior recorded history

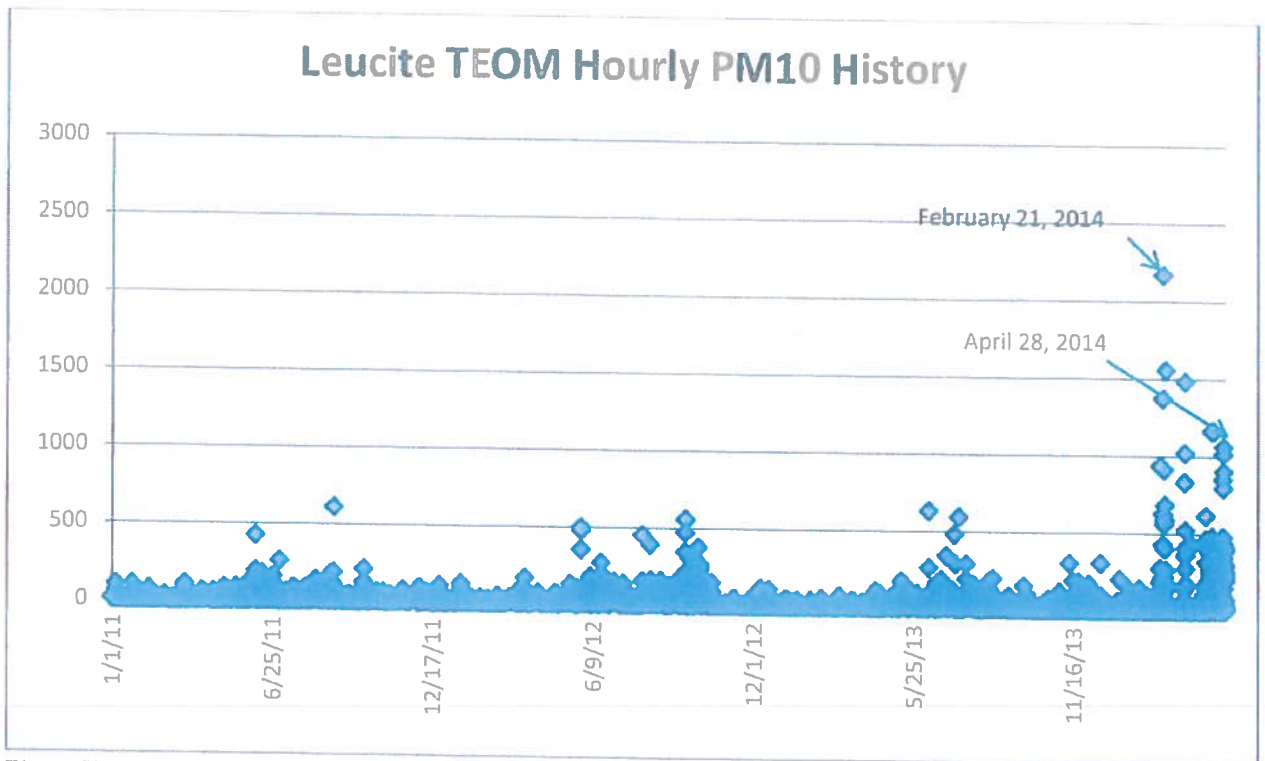


Figure V.1

Time series graphs were also produced for the PM10 daily averages over a five year span from May 5, 2009 through May 1, 2014. Out of a total of 1,823 valid data points only one reading was higher than the $219.9 \mu\text{g}/\text{m}^3$ mark seen on the 28th and that was the reading from the 17th of March. Prior to the 17th the highest 24 hr reading ever recorded at the Leucite TEOM was $204 \mu\text{g}/\text{m}^3$. This was taken on February 21, 2014. Prior to that the highest reading was $124 \mu\text{g}/\text{m}^3$ on December 7, 2009. Figure V.2 clearly shows the spike in 24 hour readings that began in February 2014 following the grazing activities on land surrounding the Leucite TEOM. It further demonstrates that the readings that occurred on the 28th of April as well as the readings that began in February 2014 are far outside the historical norms for this TEOM.

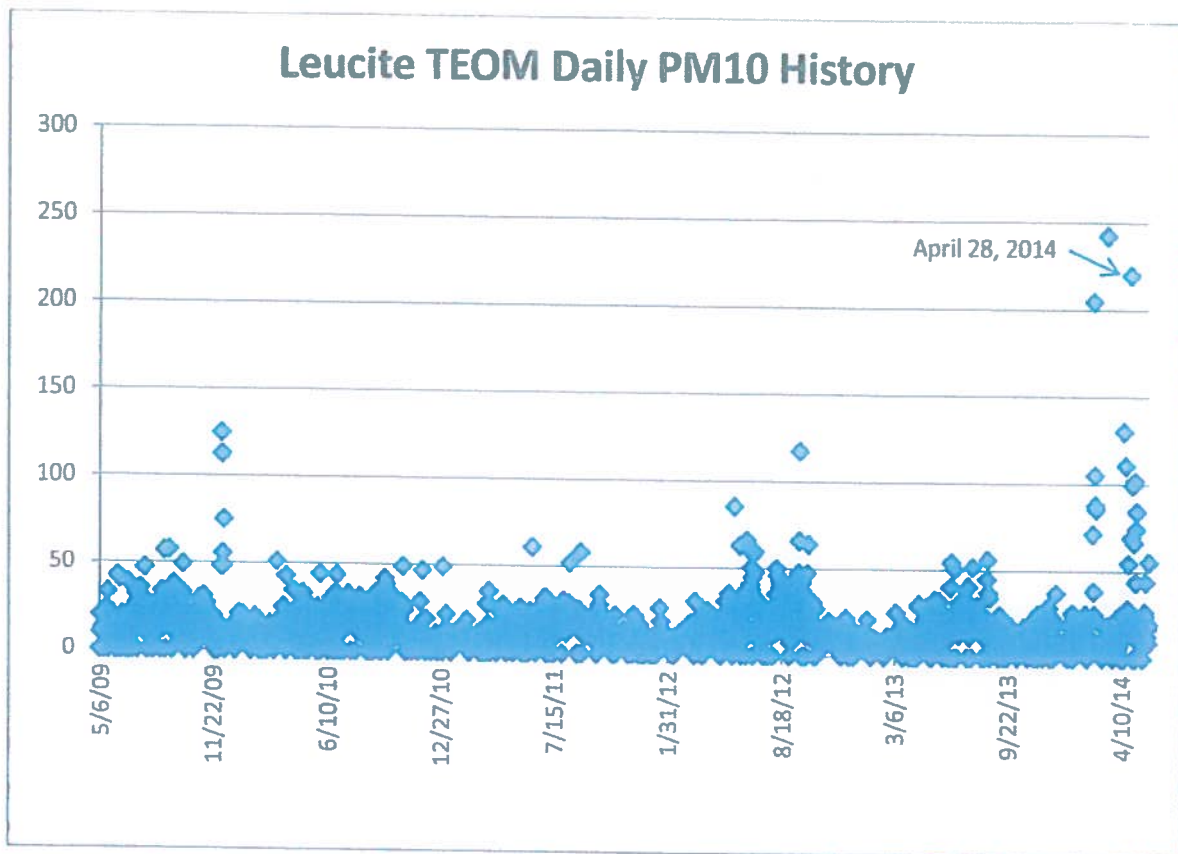


Figure V.2

Section V clearly demonstrates that the event that occurred on April 28, 2014 was far outside of normal historical fluctuations. Historical data was determined going back to May 5, 2009 for the Leucite TEOM.

Given the history, over the last 5 years, of low dust readings and solid dust mitigation performance at the Leucite TEOM, you must ask yourself what changed this winter. No additional mining has taken place in the last 5 years. Each year reclamation work has taken place at the Leucite Mine. Topsoil laydown has taken place each year along with farming activities. The only factor that changed was the extreme overgrazing that took place in the Ten Mile draw area.

VI. NO EXCEEDANCE OR VIOLATION BUT FOR THE EVENT

Section IV of this report details the compelling evidence that the exceedance which occurred on April 28, 2014 was not reasonably controllable or preventable. Section III of this report provided the detail to determine that there exists a clear causal relationship between the high wind events that carried PM10 particulates, the over grazed land not under Mine control and the exceedance as measured by the Leucite TEOM. Section V of this report provides overwhelming evidence that the event was far outside normal historical fluctuations seen at the Leucite TEOM location. The overwhelming weight of the evidence provided in these sections clearly illustrates that but for the extreme overgrazing that occurred in the winter of 2013-14 on land outside of the control of Black Butte coal which has resulted in uncontrollable PM10 particulate matter carried by the high winds there would have been no exceedance of the 24-hour PM10 standard.

All reasonable controls were in place and followed before and during the event in question.

VII. CONCLUSIONS

The exceedance's that occurred on April 28, 2014 satisfies the criteria of 40 CFR 50.1(j) and meet the definition of an exceptional event.

- The event affects air quality- the information in Sections II and III provide the conclusion that the event affected air quality.
- The event is not reasonably controllable or preventable – Section IV provides the documentation that all reasonable controls and prevention measures were in place and utilized during the event.
- The event is unlikely to reoccur at a particular location or is a natural event - as shown in Section II the cause of the exceedance was overgrazing on land surrounding the Leucite TEOM resulting in high PM10 particulate matter driven by high winds during the period of April 28, 2014.

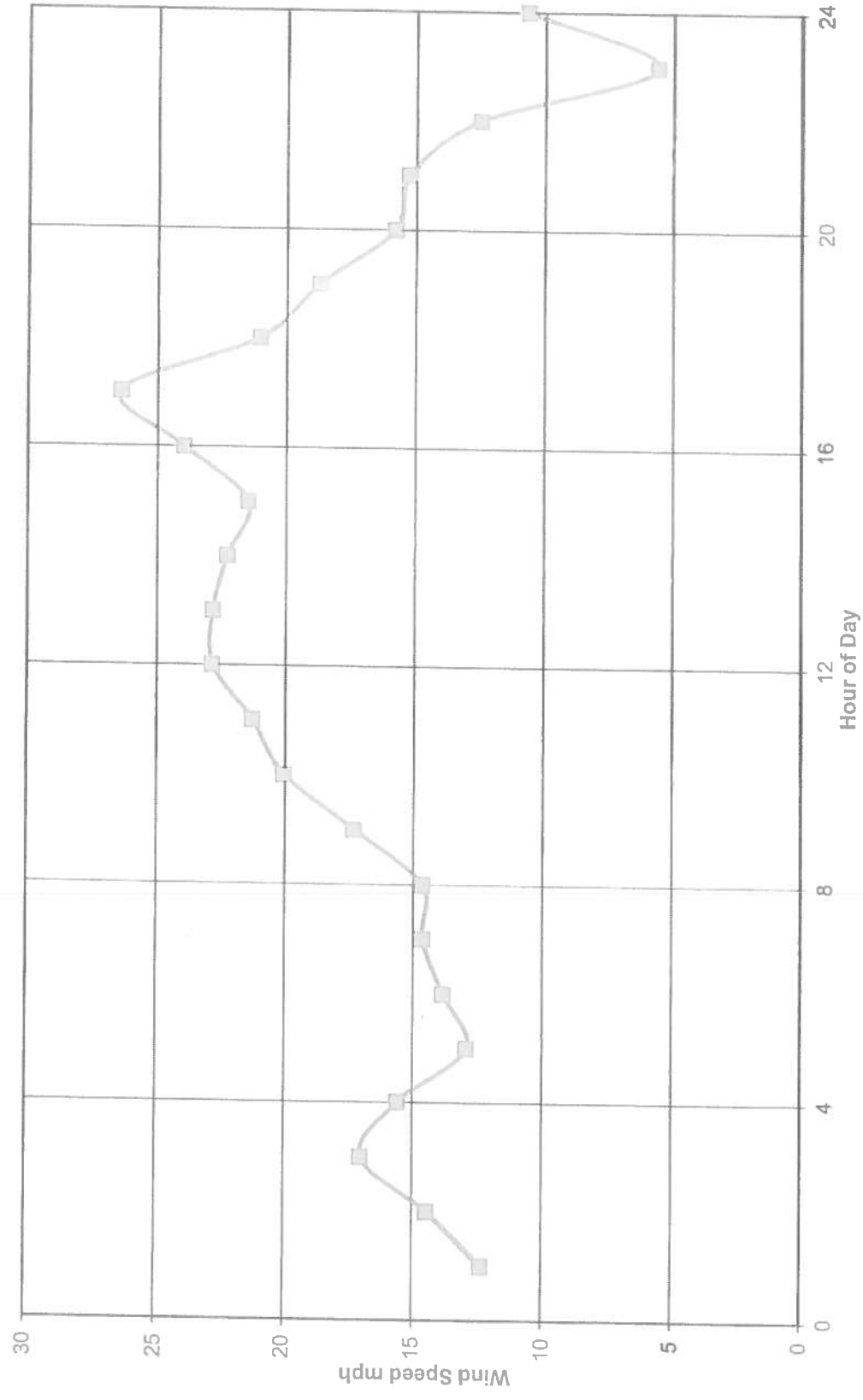
The exceedance's on April 28, 2014 of the federal 24-hour PM10 standard would not have occurred but for the over grazing and the high western winds driving windblown dust that was created on land that the Mine has no control over, based on the following evidence:

- Graphs showing the relationship of high winds, and the associated elevated PM10 readings at the Leucite TEOM.
- Photographic evidence showing the source of the fugitive dust.
- Historical fluctuation analysis and graphs showing the atypically high PM10 concentrations associated with the high wind events.
- Wind direction and speed monitoring data from the onsite weather station.

APPENDIX A

April 28, 2014 Wind Speed and Direction

Diurnal Average Wind Speed



Black Butte Mine

Meteorological Data Summary

4/28/2014 - 4/28/2014

Hourly Data

	Average/Total	Max	Min
Wind Speed (mph)	17.2	26.4	5.6
Sigma-Theta (°)	11.2	28.4	7.7
Temperature (C)	1.0	5.3	-3.0
Precipitation (in)	0.00	0.00	

Predominant wind direction was from the W sector,
accounting for 54.2% of the possible winds

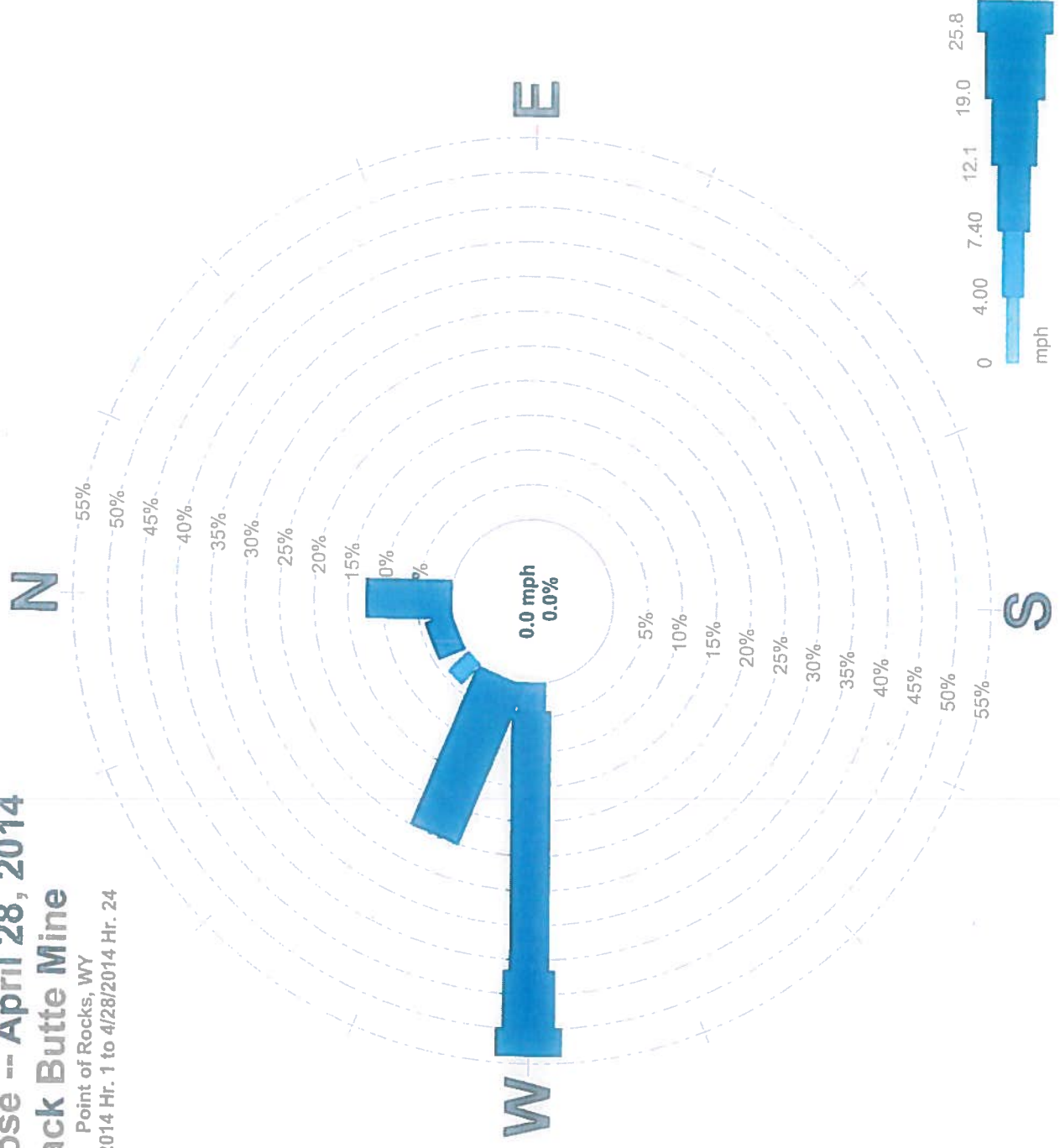
Data Recovery

Parameter	Possible (hours)	Reported (hours)	Recovery
Wind Speed	24	24	100.00%
Wind Direction	24	24	100.00%
Sigma-Theta	24	24	100.00%
Temperature	24	24	100.00%
Precipitation	24	24	100.00%

Wind Rose -- April 28, 2014

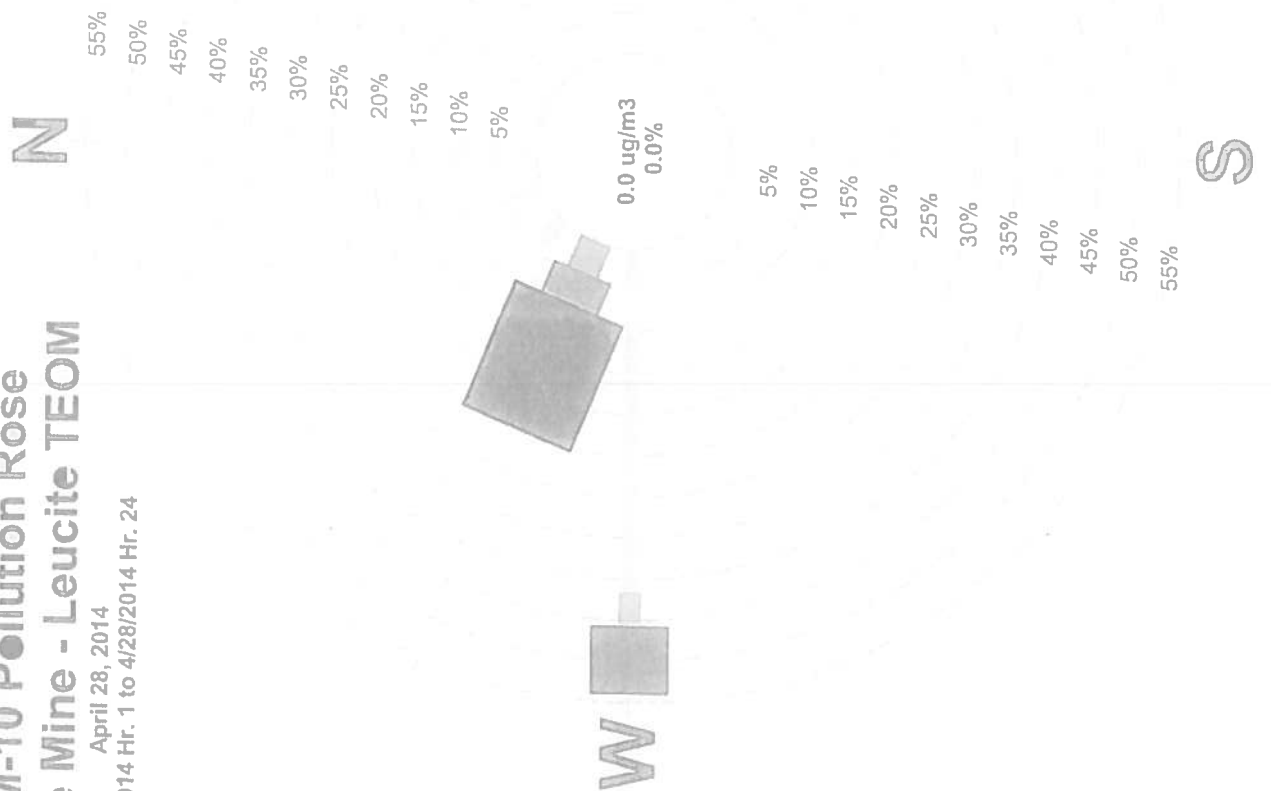
Black Butte Mine

Point of Rocks, WY
4/28/2014 Hr. 1 to 4/28/2014 Hr. 24



TEOM PM-10 Pollution Rose Black Butte Mine - Leucite TEOM

April 28, 2014
4/28/2014 Hr. 1 to 4/28/2014 Hr. 24



TEOM PM-10 Pollution Rose

Black Butte Mine - Leucite TEOM

April 28, 2014
4/28/2014 Hr. 1 to 4/28/2014 Hr. 24

RELATIVE FREQUENCY (% of Recorded Winds) TABLE

Wind Direction	ug/m3								Row Total
	0.0-75.0	75.0- 150	150- 225	225- 300	300- 375	375- 450	450- 525	525-above	
0.0 deg.(North)	12.5								12.5
22.5 deg.									0.0
45.0 deg.									0.0
67.5 deg.									0.0
90.0 deg.									0.0
112.5 deg.									0.0
135.0 deg.									0.0
157.5 deg.									0.0
180.0 deg.									0.0
202.5 deg.									0.0
225.0 deg.									0.0
247.5 deg.									0.0
270.0 deg.	41.7	4.2				8.3			54.2
292.5 deg.			4.2		4.2			16.7	25.0
315.0 deg.	4.2								4.2
337.5 deg.	4.2								4.2
	62.5	4.2	4.2	0.0	4.2	8.3	0.0	16.7	100.0

0 ug/m3 (0.0%) INVALID READINGS 0

NUMBER OF POSSIBLE READINGS 24 VALID READINGS 24 DATA CAPTURE 100.00%

Wind Rose -- April 28, 2014

Black Butte Mine

Point of Rocks, WY

4/28/2014 Hr. 1 to 4/28/2014 Hr. 24

RELATIVE FREQUENCY (% of Recorded Winds) TABLE

Wind Direction	mph						Row Total
	0.0- 4.0	4.0- 7.4	7.4-12.1	12.1-19.0	19.0-25.8	25.8-100.0	
0.0 deg.(North)				12.5			12.5
22.5 deg.							0.0
45.0 deg.							0.0
67.5 deg.							0.0
90.0 deg.							0.0
112.5 deg.							0.0
135.0 deg.							0.0
157.5 deg.							0.0
180.0 deg.							0.0
202.5 deg.							0.0
225.0 deg.							0.0
247.5 deg.							0.0
270.0 deg.			4.2	37.5	8.3	4.2	54.2
292.5 deg.					25.0		25.0
315.0 deg.		4.2					4.2
337.5 deg.				4.2			4.2
0.0	0.0	4.2	4.2	54.2	33.3	4.2	100.0

0 mph (0.0%) INVALID READINGS 0

NUMBER OF POSSIBLE READINGS 24 VALID READINGS 24 DATA CAPTURE 100.00%

APPENDIX B

License Agreement with Union Pacific Land Resources

LICENSEE'S DUP. ORIG.

LICENSE AGREEMENT

THIS AGREEMENT, made and entered into this 13th day of April, 1994, by and between UNION PACIFIC LAND RESOURCES CORPORATION, a corporation of the State of Nebraska (hereinafter called "Licensor") whose address is P.O. Box 7, Fort Worth, Texas 76101-0007, and BLACK BUTTE COAL COMPANY, a Joint Venture (hereinafter called "Licensee"), whose address is P.O. Box 98, Point of Rocks, Wyoming 82942.

RECITALS:

Licensee desires to construct, maintain and operate air quality monitoring stations and to use existing non-exclusive roadways (hereafter called "Facility") upon Licensor's premises situate in Sections 11 and 13, Township 20 North, Range 101 West of the Sixth Principal Meridian, Sweetwater County, Wyoming, (hereafter called "Licensed Premises") in the locations shown on the print hereto attached marked Exhibit "A" and made a part hereof.

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between the parties hereto as follows:

Section 1: LICENSOR GRANTS RIGHT

In consideration of the sum of Ten and No/100 Dollars (\$10.00) to be paid by Licensee to Licensor upon execution and delivery of this agreement, and in further consideration of the covenants and agreements herein contained to be by Licensee kept, observed and performed, Licensor hereby grants to Licensee, subject to the terms and conditions herein stated, the right to maintain and operate, during the term hereof, said Facility upon said Licensed Premises in the locations described in said Exhibit "A".

The foregoing grant is subject to the right and power of Licensor, its successors and assigns, to the use of the Licensed Premises for any purpose not inconsistent with the use by Licensee for the purposes herein defined.

The foregoing grant is also subject to all outstanding superior rights (including those in favor of telegraph and telephone companies, lessees of said right of way, and others) whether recorded or unrecorded and the right of Licensor to renew and extend the same.

Section 2. MAINTENANCE AND USE

Licensee shall maintain said Facility in the locations described on Exhibit "A". All work performed by Licensee on said

Licensed Premises in connection with the maintenance and use of said Facility shall be done at the sole expense of Licensee and to the satisfaction of Licensors.

Section 3. MODIFICATION OR RELOCATION OF FACILITY

The rights herein granted are subject to the needs and requirements of Licensors in the operation and improvement and use of its property, and Licensee shall, at Licensee's own expense, make any and all modifications or changes in the Facility or move the same to such new location as Licensors may designate, whenever the Facility shall unreasonably interfere with Licensors' contemplated use of the Licensed Premises. All the terms, conditions and stipulations herein expressed with reference to the maintenance and use of the Facility in the location described in Exhibit "A" shall apply to the Facility when modified or moved to a new location under the terms of this Section.

Section 4. LIABILITY

Licensee shall indemnify and hold harmless Licensors and its affiliates, and their officers, employees and agents, and all other persons, firms and corporations who have or may have the right to use said Licensed Premises, its and their officers, agents and employees, against and from any and all liability, loss, damage, claims, demands, costs and expenses of whatsoever nature, including court costs and counsel fees, growing out of personal injury to or death of persons whomsoever, or loss or destruction of or damage to property whatsoever, where such personal injury, death, loss, destruction or damage arises in any way in connection with or incident to the occupation or use of said Licensed Premises by, or the presence thereon of, Licensee, its officers, agents, employees, servants and/or licensees, unless caused by the sole and direct negligence of the Licensors, its affiliates, or its and their officers, employees or agents.

The term "affiliate" (or "affiliates" as the case may be) as used herein means any corporation which directly or indirectly controls, or is controlled by, or is under common control with Licensors.

Section 5. MECHANIC'S LIENS

Licensee shall not suffer or permit any mechanic's lien, or other lien, to be filed against said Licensed Premises or any part thereof, by reason of work, labor, services, or materials supplied, or claimed to have been supplied, to Licensee, or anyone claiming under Licensee. If any such mechanic's lien, or other lien, shall at any time be filed against said Licensed Premises, Licensee shall cause the same to be discharged of record within thirty (30) days of the date of filing the same, and if Licensee shall fail to discharge such lien within such period, then Licensors may, at its option, discharge the same by paying the amount claimed to be due without inquiry into the validity of the same and Licensee shall

thereupon reimburse Licensor within thirty (30) days for any payment so made.

Section 6. COMPLIANCE WITH LAWS

Licensee agrees to comply with all laws, rules and regulations of all regulatory bodies having jurisdiction with regard to the construction, maintenance and use of said Facility. All operations hereunder shall be conducted in compliance with all Federal, State and County laws, rules, ordinances and regulations which are applicable to the area of operations, including but not limited to those pertaining to environment, fire, sanitation, conservation, water pollution, and fish and game. All operations hereunder shall be conducted in a prudent manner. If, as a result of Licensee's operations or use of said Licensed Premises hereunder, any statute, law, ordinance, rule, regulation or requirement is violated, Licensee shall protect, save harmless, defend and indemnify Licensor, its officers, employees and/or agents, against and from any and all penalties, fines, costs and expenses, including court costs and counsel fees, imposed upon or incurred by Licensor, its officers, employees and/or agents, resulting from, or connected with, such violation and/or violations.

Section 7. SUBSIDENCE

It is expressly understood that the subjacent support of the premises described in Exhibit "A" may have been impaired by mining operations heretofore carried on beneath the surface thereof, and the right herein granted is upon the condition that Licensor, its successors and assigns, shall not be liable for damages resulting therefrom.

Section 8. TERMINATION ON NON-USE OR BREACH

It is agreed that non-use of the right herein granted or the Facility for one (1) year or the breach of any covenant, stipulation or condition herein contained to be kept and performed by Licensee shall, at the option of Licensor, forthwith work a termination of this agreement and all rights of Licensee hereunder. A waiver by Licensor of a breach by Licensee of any covenant or condition of this agreement shall not impair the right of Licensor to avail itself of any subsequent breach thereof.

Section 9. TERMINATION ON NOTICE

This agreement may be terminated by written notice given by either Licensor to Licensee or Licensee to Licensor on any date in such notice stated, no less, however, than thirty (30) days subsequent to the date on which such notice shall be given.

In the event such notice is given by either party by mail, the notice shall be deemed to have been given on the date said postal notice is deposited with the Postal Service. The address of Licensee for all purposes of notification required by this

agreement, unless written notice to the contrary is given by Licensee, shall be: 1000 Kiewit Plaza, Omaha, Nebraska 68131. The address of Licensor for all purposes of this agreement shall be P.O. Box 7, Mail Station 3005, Fort Worth, Texas 76101-0007, unless written notice to the contrary is given by Licensor to Licensee.

Section 10. RESEEDING PROVISION

Licensee hereby agrees that the surface of any of the right-of-way disturbed in the exercise of the rights granted hereunder to Licensee shall be reseeded by Licensee, at the sole expense of Licensee, in a manner consistent with applicable Governmental requirements on comparable adjacent areas of public lands. Additionally, Licensee shall eradicate all noxious weeds from the right-of-way and shall not allow the same to go to seed.

Section 11. REMOVAL OF FACILITY

Within 30 days after the termination of this agreement howsoever, Licensee shall at Licensor's option and at Licensee's own expense, remove the Facility pursuant to the terms of this agreement and restore the Licensed Premises to as good condition as it was in at the time of the construction of said Facility, to the reasonable satisfaction of Licensor; and if Licensee fails so to do, Licensor may do such work of removal and restoration at the expense of Licensee.

In the event of the removal of said Facility as in this Section provided, Licensor shall not be liable to Licensee for any damage sustained by Licensee for or on account of such removal, and such removal shall not prejudice or impair any right of action for damage, or otherwise, which Licensor may have against Licensee.

Section 12. EFFECTIVE DATE - TERM

This agreement shall take effect as of the 1st day of March, 1994, and will run concurrently with the term of the Black Butte and Leucite Hills Mine Permits unless terminated as hereinbefore provided.

Section 13. AGREEMENT NOT TO BE ASSIGNED

Licensee shall not assign this agreement, or any interest therein, without the written consent of Licensor, except to a parent, subsidiary or affiliate of Licensee, provided written notice of such assignment is given to Licensor.

Section 14. SUCCESSORS AND ASSIGNS

Subject to the provisions of Section 14 hereof, this agreement shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, executors, administrators, successors and assigns.

Section 15. NON-FOREIGN CORPORATION

In accordance with Section 1445(b) (2) of the Internal Revenue Code, Licensor, Federal ID No. 13-2678588, certifies that it is not a foreign corporation and withholding of Federal Income Tax from the amount realized will not be made by Licensee. Licensor understands that this certification may be disclosed to the Internal Revenue Service by the Licensee and that any false statement made here could be punished by fine, imprisonment, or both.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in duplicate as of the date first herein written.

UNION PACIFIC LAND RESOURCES
CORPORATION

By: [Signature]
Its: Attorney-in-Fact

Witness:

Paul E. White

BLACK BUTTE COAL COMPANY

By: [Signature]
Its: Member - Management
Committee

Attest:

Secretary (SEAL)

APPENDIX C

Action Plan Event Log – Action Reports for Day shift on April 28, 2014

Action Plan Event Log Action Report

THIS REPORT WILL BE COMPLETED IN ITS ENTIRETY BY THE ON SHIFT SUPERINTENDENT PRIOR TO LEAVING AT THE END OF THE SHIFT.

4/28/14
Days

I. Concentrations which trigger the action plan.

In the table below record the date, time, and concentration at which action plan levels were reached.

	300 ug/m ³ (1-hour)			70 ug/m ³ (24-hour)			90 ug/m ³ (24-hour)			110 ug/m ³ (24-hour)			130 ug/m ³ (24-hour)		
	Date	Time	1-hour reading	Date	Time	24-hour reading	Date	Time	24-hour reading	Date	Time	24-hour reading	Date	Time	24-hour reading
Pit 10															
Pit 14															
Leucite	4/28	11:00	250												
UPWIND															

II. Identify problem areas, ensure problem areas are addressed, ensure adequate water trucks are operating in the areas, and record when and where watering activities were being done. Please give priority to the areas listed in the table below

Place an X by each area that is visibly contributing to airborne dust, and describe the severity of dust emission in Section VI of this report. Also, fill out the supplemental information for each applicable area. Take photograph's if possible.	Was the water truck requested to address this specific area?	At what time was the initial request made?	How many loads of water were applied in this area.	At what times was the water truck in this area
South half of Pit 10 highwall	Yes / No	am/pm	loads	
Pit 10 assist bench	Yes / No	am/pm	loads	
Road in spoils on North side of Pit 10	Yes / No	am/pm	loads	
Pit 11 highwall	Yes / No	am/pm	loads	
Pit 11 spoils	Yes / No	am/pm	loads	
Dragline #1's pad and access road	Yes / No	am/pm	loads	
Pit 10 inactive spoils	Yes / No	am/pm	loads	
Pit 10 pre-strip	Yes / No	am/pm	loads	
Pit 10 topsoil stockpiles	Yes / No	am/pm	loads	
Pit 10 out of pit stockpiles (OOPS)	Yes / No	am/pm	loads	
Pit 11 OOPS	Yes / No	am/pm	loads	
Pit 11 topsoil pile	Yes / No	am/pm	loads	
Pit 10 hopper/stockpile	Yes / No	am/pm	loads	
Pit 8 stilling shed/ stockpile	Yes / No	am/pm	loads	
Pit 14 haul roads	Yes / No	am/pm	loads	
Pit 14 OOPS or topsoil stockpiles	Yes / No	am/pm	loads	
Drag #2's pad and access road	Yes / No	am/pm	loads	
X Leucite TEAM	Yes / No	am/pm	loads	No Access to TEAM
	Yes / No	am/pm	loads	
	Yes / No	am/pm	loads	
	Yes / No	am/pm	loads	
	Yes / No	am/pm	loads	

Were the water trucks below available on the day of the event?	If the truck was available, please specify the time during the shift that the water truck was put into service.	If unavailable, please specify the reason. Include any WO's associated with maintenance and repairs.
19-0981 Yes / No		Down - Engine Rebuild
19-1007 Yes / No	Per all shift Pit 10 & 14	
Kapetsov Rebuild		Replacement Parts - Arrive 4/29/14

Action Plan Event Log
Action Report

III. Record weather conditions and possible external influences.

In the space below, describe wind, precipitation, and other weather events as they occur throughout the day. Take photographs if possible.

Extreme dry conditions @ Leucite TEOM
Winds peaked @ 26 mph @ 4:00 PM
NW - w 2.90 cc

In the space below, describe any possible external influences. Take photographs if possible (ex. Oil equipment traffic, livestock in the area, etc.)

Dust all coming from foothills surrounding TEOM
Not from mining or reclamation activities
Area extensively over-grazed, no vegetation
Access to TEOM is for light vehicles only,
no ability to get water-trucks in.

IV. Consider modifying operations contributing to dust.

In the space below, describe any modifications to operations which occurred as part of the Action Plan.
Include any changes put into place in advance of events which contributed to PM10 concentrations reaching action plan levels.

Dust all coming from vicinity of Leucite TEOM
Only loader was running, it was in Pit 24

V. Notify the Production Superintendent.

Please record when and how the Production Superintendent was notified.

e-mail alerts, IML website,
contact with supervisor

Action Plan Event Log
Action Report

VI. Record actions taken

In the space below, summarize all actions performed in response to the Action Plan.
In addition, include descriptions of the sources of dust listed in section II of this report.

No opportunity to take action

Dust all coming from east side of
valley due to poor range conditions

No access to TEOM site for water-trucks

Action Plan Event Log Action Report

VI. Photographic documentation.

Please attached any photographs taken during the event to this section. Otherwise, submit photographs and videos of the event to the Engineering Department

**Action Plan Event Log
Action Report**

VII. Supporting documentation

Please list any supporting documentation attached to this report. Examples include written field notes, witness accounts, and operational logs.

VII. Shut Down documentation

Please attach a completed copy of a Shut Down Report to this Action Report in order to complete the Action Plan Event Log.

Andy Thomson
Print Name

[Signature]
Signature

4/29/14
Date

Please return completed copy to the Black Butte Coal Company Air Permit Coordinator (Andy Thomson)

If you have any questions on completing this form, do not hesitate to contact Andy Thomson day or night

Office: 307-352-6212
Work Cell: (970)629-2104
E-mail: a.thomson@aecoal.com

Black Butte Coal Company Air Permit Coordinator (Andy Thomson) - Responses to Public Comments, Action Plan Event Log and Shut Down Information and Shut Down Report

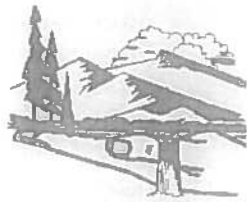
Shut Down Report

[illegible]



Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's
environment for the benefit of current and future generations.*



Matthew H. Mead, Governor

Todd Parfitt, Director

January 12, 2015

Certified Mail Receipt Number: 7012 2210 0000 5837 9137

Steve Gili
General Manager
Black Butte Coal Company
P.O. Box 98
Point of Rocks, WY 82942

**Re: Request for Flag under the Exceptional Event Rule for Leucite Hills PM₁₀ April 28, 2014
Exceedance**

Dear Mr. Gili,

The Air Quality Division (AQD) has reviewed the request to flag the April 28, 2014 Leucite Hills PM₁₀ ambient monitored data at the Black Butte Mine (BBCC) as an Exceptional Event in accordance with the 40 CFR Part 50.14. Although the AQD has placed a temporary flag in AQS on the April 28, 2014 PM₁₀ data, with the description "Possible Exceptional Event – under evaluation by AQD", the team of AQD staff found deficiencies in the "weight of evidence" approach presented in the July 15, 2014 submittal. Supplemental information is needed before AQD can determine if all elements were addressed to exclude event-related concentrations from regulatory determinations.

The review team requests the following information to clarify the packet:

- Please provide an explanation for the observed downward spike in Hourly PM₁₀ concentration which occurred at 1:00 PM in relation to the preceding and subsequent hourly concentrations.
- Please submit hourly wind direction data for the day of the exceedance in tabular form, so that it may be compared to hourly concentration and wind speed data.

The AQD level of review for Exceptional Event packages is greatly dependent on the level of detail and information provided by the facility in the request to flag exceedances. EPA has also provided examples of exceptional events demonstrations that meet the requirements of the draft guidance. The following link <http://www.epa.gov/ttn/analysis/exevents.htm> is the best place to find examples of information that are needed to have EPA concur with an exceptional event demonstration.

Please keep in mind that while AQD has an extensive staff of monitoring, compliance and permitting personnel available to evaluate the documentation packet, this packet will also be reviewed by the public and EPA.

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7755 FAX 777-7752	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7369 FAX 777-5976	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5964	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
--	---	---	---	--	--	---



Please submit the requested supplemental information to Cara Keslar, Monitoring Section Supervisor no later than two (2) weeks from receipt of this letter. The AQD evaluation team will reconvene to determine if all requirements were met under the Exceptional Event Rule. If all requirements of the rule were met, AQD will keep the flag in the AQS database and the documentation package will be made available for public review and submitted to EPA Region 8 for concurrence. If you have any questions please contact me at (307) 777-7104 or daniel.sharon@wyo.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Dan Sharon', written in a cursive style.

Daniel Sharon
Monitoring Project Manager

Cc: Black Butte Mine Monitoring File

VIII. Requested Supplemental Information

Hourly wind direction data for April 28, 2014.

Time	Hourly Wind Speed (mph)	Max Wind Speed (mph)	Hourly Wind Direction (deg)	Leucite Hourly PM10 Conc. ($\mu\text{g}/\text{m}^3$)
04/28/2014 01:00 AM	14.5	23.1	265	3.5
04/28/2014 02:00 AM	17	26.8	268	2.6
04/28/2014 03:00 AM	15.6	24.1	267	3.3
04/28/2014 04:00 AM	12.9	21.8	265	4.2
04/28/2014 05:00 AM	13.9	21.1	264	5.1
04/28/2014 06:00 AM	14.7	24.7	265	7.7
04/28/2014 07:00 AM	14.7	25.4	264	14.4
04/28/2014 08:00 AM	17.3	32.5	278	35.5
04/28/2014 09:00 AM	20.1	30.7	287	217.4
04/28/2014 10:00 AM	21.3	33	282	798.2
04/28/2014 11:00 AM	22.8	44.9	287	1016.7
04/28/2014 12:00 PM	22.8	41	291	1064.3
04/28/2014 01:00 PM	22.3	43.1	296	345.2
04/28/2014 02:00 PM	21.5	43.3	292	904.8
04/28/2014 03:00 PM	24	38	279	437.6
04/28/2014 04:00 PM	26.4	43.5	280	395.8
04/28/2014 05:00 PM	21	37.6	274	148.7
04/28/2014 06:00 PM	18.7	26.8	11	17.2
04/28/2014 07:00 PM	15.8	27.7	357	12.3
04/28/2014 08:00 PM	15.3	26.6	358	58.8
04/28/2014 09:00 PM	12.5	31.4	342	5.2
04/28/2014 10:00 PM	5.6	13.1	313	5.2
04/28/2014 11:00 PM	10.7	19.2	278	9.1
04/29/2014 12:00 AM	12.3	21.1	275	0.4

Downward spike in hourly PM10 concentration at 1:00 pm in relation to preceding and subsequent hourly concentrations.

There is no obvious, data supported, reason for the downward spike in hourly PM10 concentrations at the 1:00 pm hour. Sustained wind speeds, maximum wind speeds and direction are relatively consistent with the hour preceding and the subsequent hour. Since there were no operations taking place at Leucite on the 28th of April it is not due to a change in equipment operation. Rainfall readings from the Leucite meteorological station were looked at and no measurable readings were recorded on the 28th of April. One potential source of this downward spike is the distance between the Leucite TEOM and the Met station. The Met Station is roughly 10 miles south of the Leucite TEOM. It is possible that weather conditions at one location may not be identical to the conditions at the other location.

Given the data and facts as they are, it is not possible to draw an absolute conclusions to explain the downward spike at 1:00 pm. The most logical conclusion would be that fugitive dust measurements are more complex than simply wind speed and direction.



Matthew H. Mead, Governor

Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's
environment for the benefit of current and future generations.*



Todd Parfitt, Director

March 5, 2015

Mr. Steve Gili
Black Butte Coal Company
PO Box 98
Point of Rocks, WY 82942

RE: July 15, 2014 Request for Flag under the Exceptional Event Rule for PM₁₀, April 28, 2014 Exceedance

Dear Mr. Gili,

On April 28, 2014, the Black Butte Coal Company's (BBCC) Leucite TEOM recorded an exceedance of the 24-hour PM₁₀ standard, with a final average concentration of 219.9 µg/m³.

On August 5, 2014 the Air Quality Division (AQD) received a request that data for the Leucite TEOM on this day be flagged under 40 CFR Part 50.14 "Treatment of Data Influenced by Exceptional Events" due to high winds.

After review of the submitted materials, the AQD has decided to pursue BBCC's request to flag the PM₁₀ data collected at the Leucite TEOM on April 28, 2014 under 40 CFR 50.14.

The next step in the process is a 30 day public comment period. In order to move forward, the AQD needs an electronic copy of all the documentation and correspondence submitted during the review process. All correspondence, starting with the original notification to the AQD, the original Exceptional Event packet, any requests for additional information, responses to those requests and other information submitted to the AQD during the review process should be combined into a single, chronologically ordered .pdf document and submitted to the AQD.

Once received, the chronological packet will be posted to the AQD's website and the public comment period will be advertised.

BBCC's final packet is requested on or before April 6, 2015. Please email it to daniel.sharon@wyo.gov.

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FAX 777-7782

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FAX 777-6452

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FAX 777-5616

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FAX 777-5864

SOLID & HAZ. WASTE
(307) 777-7752
FAX 777-5973

WATER QUALITY
(307) 777-7781
FAX 777-5973



Please contact Daniel Sharon at (307) 777-7104 or daniel.sharon@wyo.gov if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cara Keslar', written in a cursive style.

Cara Keslar
Monitoring Section Supervisor

Cc: Daniel Sharon, Monitoring Project manager
Black Butte Coal Company Monitoring File
Tony Hoyt, District 5 Engineer